



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,962	12/30/1999	FRANK JOSEPH PENNISI, JR	9D-EC-19319	7121

7590 11/29/2006

John S. Beulick
Armstrong Teasdale LLP
One Metropolitan Square, Suite 2600
St. Louis, MO 63102

EXAMINER

VAN DOREN, BETH

ART UNIT PAPER NUMBER

3623

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/475,962

Applicant(s)

PENNISI, JR, FRANK JOSEPH

Examiner

Beth Van Doren

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6,8-17,22,24-33,38 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6,8-17,22,24-33,38 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

1. The following is a Final Office action in response to communications received 09/01/2006. Claims 1, 8, 17, and 33 are amended. Claims 3-4, 19-20, and 35-36 have been canceled. Claims 1, 6, 8-17, 22, 24-33, 38, and 40 are pending in this application.

Response to Amendment

2. Applicant's amendment to claim 8 is sufficient to overcome the claim objections set forth in the previous office action.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1, 6, 8-17, 22, 24-33, 38, and 40 are rejected under 35 U.S.C. 101 because the claimed invention is directed towards non-statutory subject matter. In order to be considered statutory, the claimed invention must produce a useful, concrete, and tangible result. An invention that fails to produce a tangible result is one that involves no more than the manipulation of an abstract idea. In order to be concrete, the result must be substantially repeatable or re-produce the same result. The result is useful when there is a real-world practical application.

Claim 1 is directed towards non-statutory subject matter because it lacks tangibility. Claim 1 recites the steps of updating the respective delivery agent capacity utilization matrix, calculating a zone workload signal for a delivery date, setting capacity flags for delivery dates (including an over capacity and under capacity flag), and predicting capacity utilization. However, none of these steps produce a functional, real world result as all these steps merely

manipulate intangible, abstract ideas. Therefore, it is respectfully submitted that claim 1 is directed towards non-statutory subject matter.

Independent claims 17 and 33 recite substantially similar limitations to claim 1 and are therefore also rejected under 35 U.S.C. 101 as being directed towards non-statutory subject matter for the same reasons set forth above.

Claims 6 and 8-16, 22, 24-32, 38, and 40 depend from claims 1, 17, and 33 and therefore are also rejected under 35 USC 101 based on the same reasoning set forth above.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 6, 8-17, 22, 24-33, 38, and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, for the following reasons:

Claim 1 recites "calculating a workload signal for the delivery date approved by the buyer, [...] the new capacity value equals (old capacity value + (number of filled slots)/(zone maximum))". It is not clear what is specifically being claimed since the old capacity value and the number of filled spots appear to represent substantially the same value (i.e. the old capacity value represents the volume used, and the number of filled slots also represent the amount of volume used). Based on the language of the claim, examiner believes the number of filled slots is supposed to represent the number of slots filled by the approving buyer's current order.

Art Unit: 3623

Therefore, examiner believes that the limitation should more appropriately be --calculating a workload signal for the delivery date approved by the buyer, [...] the new capacity value equals (old capacity value + (number of slots currently filled by the approval of the buyer)/(zone maximum))--. Clarification and correction is required.

Claim 1 further recites “setting a capacity flag for each delivery date by comparing the sum of capacity values [...], the sum of capacity values equals the sum of capacity values corresponding to a predetermined number of preceding delivery dates”. It is not specifically clear as to what these capacity values are and how they relate to the rest of claim 1. Claim 1 recites “the capacity utilization”, “the delivery zone capacity”, “a capacity utilization matrix”, and “the new capacity value”. It is not clear if the “capacity values” refers to one of these values or to some other value measure of capacity. Based on the claim language, examiner believes that the capacity value relates to the new capacity value in some way, such as the final value of the “new capacity value” of the delivery agent when it delivers all of the contained orders.

Language to this effect or other clarification is required.

Further, with regards to this “setting a capacity flag” limitation as well as the “setting an over capacity flag” and “setting an under capacity flag” limitations, it is unclear as to how these capacity flags are specifically used and how they relate to the rest of claim 1. This rejection flows from the 35 USC 101 rejections set forth above, where it was asserted that this step lacked a tangible result. Since it is unclear what the result is, it is also unclear as to what the applicant is trying to distinctly claim by these limitations. Clarification is required.

Finally, claim 1 recites “predicting the capacity utilization of the goods delivery system by determining whether the zone workload signal for a predetermined number of days is

Art Unit: 3623

increasing or decreasing". First, it is unclear as to how the volume used would decrease (instead of merely remaining constant). Second, it is unclear as to what capacity the "capacity utilization" is referring to and thus how it is being measured or judged. As discussed above, capacity occurs in several ways throughout the claim. The only specific antecedent basis found for "the capacity utilization" occurs in the preamble of the claim. Thus, it is not clear what specific values are being used to judge the capacity utilization of the system. Based on the claim language, examiner believes that this overall capacity utilization relates to the total capacity used for the total of the delivery agents in the system, the total capacity for each agent relating to the "new capacity value" in some way, such as the final value of the "new capacity value" when the order is shipped for each agent. Clarification is required.

Thirdly, it is not specifically clear as to how this prediction relates to and is used by the rest of this claim. This is further discussed above in the 35 USC 101 rejections, with the lack of tangible result. It is not specifically clear what the "predicting" is, what it represents, or how it would be used. Clarification is required.

Independent claims 17 and 33 recite substantially similar limitations to claim 1 and are therefore also rejected under 35 U.S.C. 112, second paragraph, for the same reasons set forth above.

Claims 6 and 8-16, 22, 24-32, 38, and 40 depend from claims 1, 17, and 33 and therefore are also rejected under 35 USC 112, second paragraph.

Art Unit: 3623

Allowable Subject Matter

7. Claims 1, 6, 8-17, 22, 24-33, 38, and 40 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. 112, 2nd paragraph, and 35 U.S.C. 101 set forth in this Office action.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Asthana et al. (U.S. 5,265,006) discloses predicting needs for delivery vans in service regions and tracking capacity and utilization of delivery vans.

Spicer (U.S. 5,157,714) teaches tracking available capacity for delivery.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beth Van Doren whose telephone number is (571) 272-6737.

The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz can be reached on (571) 272-6729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

bvd
bvd

November 21, 2006

Beth Van Doren
Beth Van Doren
Patent Examiner
AU 3623